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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,449	02/19/2004	Wci-Cheng Wang	P-3641.274	9920
7590	07/02/2007			
Shaw Y. Lin 4675 Exbury Ct. San Diego, CA 92130			EXAMINER FLORY, CHRISTOPHER A	
			ART UNIT 3762	PAPER NUMBER
			MAIL DATE 07/02/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/790,449

Applicant(s)

WANG, WEI-CHENG

Examiner

Christopher A. Flory

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3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 5 and 8-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5 and 8-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 5 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Unsworth et al. (US Patent 6,615,080, hereinafter Unsworth'080) in view of Martin (US 2003/0138922, hereinafter Martin'922) or in view of Holcomb (EP 428474 A2, hereinafter Holcomb'474).

Regarding claims 5 and 10-12, Unsworth'080 discloses a method of generating a stimulation signal to non-invasively stimulating the stimulation points surrounding K1 and FHA acupuncture points (Figs. 7 and 10; ABSTRACT; column 3, lines 50-55) with at least a set of non-invasive electrical stimulation (Fig. 7, electrodes 6a and 6b); said method comprising mounting a non-invasive stimulation device onto the stimulation points (electrodes are disclosed as being self-adhesive in column 5, line 65 through column 6, line 3); wherein the stimulating comprises at least a set of non-invasive electrical stimulation pulses (column 5, line 44 through column 6, line 11).

Unsworth'080 also shows a multiple electrode carrying insole (Fig. 7, insert 17) housed in a shoe-like device (Fig. 7, footwear 15) carrying the at least two electrodes (electrodes 6a and 6b) and a circuit for generating the stimulation signal (NMES device

10; column 5, line 43 through column 6, line 11); providing a securing means for mounting the at least two electrodes on the said insole (column 10, lines 9-26).

Regarding the clause "of/for moderating lower and upper back pain in a patient," it has been held that a recitation of the *intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art* in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In this case, the structure of the Unsworth'080 device is capable of delivering electrical stimulation to the sole of the foot in the same manner as the claimed invention, and would therefore logically and expectably be capable of the intended use of relieving back pain.

Unsworth et al. discloses the device as being effective in increasing blood flow in the stimulated region (column 6, lines 4-11), which Applicant discloses in paragraph [22] as a component of end result of back pain relief. Therefore, the claimed invention does not distinguish over the Unsworth'080 reference. Furthermore, a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Further regarding claims 5 and 10-12, Unsworth'080 discloses the invention substantially as claimed and described above, but does not expressly disclose the at least two permanent magnets. In the same field of endeavor Martin'922 teaches that

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proponents of alternative medicine use magnets to improve a wide variety of medical conditions, especially those causing pain, using products such as magnetic shoe insoles (paragraph [63]). Additionally, Holcomb'474 teaches a therapeutic shoe and method for increasing blood circulation, reducing fatigue and reducing pain wherein the shoe has a plurality of magnet bodies placed in the shoe sole (ABSTRACT; Fig. 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Unsworth'080 with the addition of two or more magnets as taught in either Martin'922 or Holcomb'474 to provide the Unsworth'080 device with the same benefit of further treating medical pain.

It is noted that, although Unsworth'080 does not explicitly state placement over the K1 and FHA acupuncture points, it is clear from Fig. 10 of Unsworth'080 and Fig. 1a of the instant application that the Unsworth et al. device delivers electrical stimulation to the claimed foot regions of the ball and heel (column 3, lines 50-55) *which would inherently result in stimulation of points surrounding the K1 and FHA acupuncture points*, and therefore the claimed invention does not distinguish over the prior art.

Regarding claim 8, Unsworth et al. discloses a delivering step comprising delivering an intermittent stimulation signal (column 5, lines 52-63). The intermittent stimulation signal is taken to be the cycle of 12 seconds on and 48 seconds off.

Regarding claim 9, Unsworth et al. discloses a delivering step comprising a continuous stimulation signal (column 5, lines 52-63). The continuous signal is considered to be the biphasic square wave pulses that are delivered for a continuous 12 seconds. Likewise, it is understood from the user interface as disclosed in Unsworth et

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al., that the device continues to deliver biphasic pulses in a 12 seconds on, 48 seconds off manner until the user adjusts the intensity dial to zero (i.e. "off"). Therefore, this can be considered a stimulation signal (wherein the signal is considered to be the overall stimulation pattern) that is delivered continuously from the time the device is put on until the user makes the decision to take the device off or turn the stimulus intensity to zero, or effectively turn the device off. Given either or both interpretations, this claim limitation of the instant application does not distinguish over the prior art.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 5 and 8-12 have been considered but are moot in view of the new ground(s) of rejection.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher A. Flory whose telephone number is (571) 272-6820. The examiner can normally be reached on M - F 8:30 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher A. Flory

19 June 2007

/George Manuel/  
**George Manuel**  
Primary Examiner